

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0049484; AI 18783; PER20050001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

**The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:**

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- |      |                          |  |
|------|--------------------------|--|
| I.   | <b>THE APPLICANT IS:</b> | Town of Ringgold<br>Wastewater Treatment Facility No. 1<br>P.O. Box 565<br>Ringgold, LA 71068  |
| II.  | <b>PREPARED BY:</b>      | Angela Marse   |
|      | <b>DATE PREPARED:</b>    | January 27, 2006   |
| III. | <b>PERMIT ACTION:</b>    | LPDES permit <u>LA0049484</u> , AI <u>18783</u> ; <u>PER20050001</u><br><br>LPDES application received: November 9, 2005<br><br>LPDES permit issued: May 1, 2001<br>LPDES permit expired: April 30, 2006 |

## IV. FACILITY INFORMATION:

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Ringgold.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on US Hwy. 371, 1.55 miles north of the intersection with La. Hwy. 154 in Ringgold, Bienville Parish.
- D. The treatment facility consists of a large primary settling basin, two-cell oxidation pond w/rock dike separation, the effluent cell includes brush rotor aeration, and twin rock-reed filters. Disinfection is by chlorination.

- E. Outfall 001

Discharge Location: Latitude 32° 20' 22" North  
Longitude 93° 16' 48" West

Description: treated sanitary wastewater

Design Capacity: 0.185 MGD

Type of Flow Measurement which the facility is currently using:  
Combination Totalizing Meter / Continuous Recorder

**V. RECEIVING WATERS:**

The discharge is by effluent pipe, thence into Tucker Branch, thence into Four Mile Bayou, thence into Black Lake Bayou in segment 100702 of the Red River Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100702 of the Red River Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Full	Full	Full	Full	Full	N/A	N/A	Full

<sup>1/</sup>The designated uses and degree of support for Segment 100702 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303(d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. In addition, it further requires that states develop TMDL management plans for waterbodies determined to be water quality limited. Segment 100702 of the Red River Basin is on the 2004 LDEQ 303(d) List of impaired waterbodies. Impairment is attributed to low dissolved oxygen (EPA – Category 5).

BOD<sub>5</sub> is used as a method to measure the amount of dissolved oxygen in the waste stream utilized by organisms during the decomposition of organic material over a five day period. Monitoring for BOD<sub>5</sub> allows for the determination of the rate of oxidation in the wastestream. Therefore, to protect against the potential for discharges of DO at levels exceeding state water quality standards, BOD<sub>5</sub> limits have been placed in the permit.

TMDL Studies have not been conducted for the Red River Basin. Therefore, permit effluent limits are the same as the previous permit. TMDLs for the Red River Basin are scheduled for completion by 2008. A reopener clause will be established in the permit to allow for any requirements or more stringent effluent limitations imposed by a TMDL.

#### VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100702 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered species or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

#### VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit modification and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation  
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse  
Permits Division  
Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

**Final Effluent Limits:**

**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD <sub>5</sub>		10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy for facilities of this treatment type and size.
TSS		15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

**Other Effluent Limitations:**

**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0049484: Issued: May 1, 2001  
Expired: April 30, 2006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD <sub>5</sub>	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

The permit contains pollution prevention language.  
The permit contains pretreatment language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**

**A) Inspections**

A review of the files indicates the following most recent inspection conducted for this facility.

Date -- September 20, 2004  
Inspector - LDEQ  
Findings and/or Violations -

1. Effluent was clean, no odor.
2. No exceedences in the past 12 months.
3. Plant grounds were well maintained.
4. No areas of concern noted.

**B) Compliance and/or Administrative Orders**

A review of the files indicates no recent enforcement actions administered against this facility.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning **September, 2003** through **October, 2005** has revealed the following violations:

<u>Effluent Characteristic</u>	<u>Number of Violations</u>
Fecal Coliform	1

**XII. ADDITIONAL INFORMATION:**

Please be aware that the Department will be conducting a TMDL in the Red River Basin scheduled for completion in 2008. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions as a result of the TMDL. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.185 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.185 \text{ MGD} \times 10 \text{ mg/l} = 15 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 01 and 0.5 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Continuous	Recorder
BOD,	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, pretreatment language has been included in the proposed permit. This language is consistent with pretreatment language in the previous permit.

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV

**REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Ringgold, Wastewater Treatment Facility No. 1, November 9, 2005.